Muthoot Institute of Technology and Science (MITS)

Department of Computer Applications

II Semester MCA

20MCA132 OBJECT ORIENTED PROGRAMMING LAB

Schedule of Lab Work

Sl.No	Program Name	Planned Date
7	**Class and object [CO2]- Set 7- Write these programs in Observation Book (1 hr)**	
7.1	Implement the concept of class and object using the student class	10.03.2025
7.2	Implement default constructor using rectangle class	10.03.2025
7.3	Implement parameterized constructor using student class	10.03.2025
8	**Classes and Objects [CO 2]- Set 8- Fair record Questions- Prepare the fair record (2hrs)**	
8.1	Program to demonstrate use of command line arguments to initialize values to member variables in a class and to display them. **Hint:-** Create a class containing Rlno, stud_name, engmark, mathsmark, totalmark. While executing the program we have to pass arguments through command line. These values are obtained in an array which is passed as argument to main function, here it is args[ ]. The marks are converted correspondingly and then passed to constructor where values are stored to class variables. Find the total marks and later displayed using display function.	10.03.2025
8.2	Program to demonstrate use of constructors to initialize values to member variables in a class and to display them. **Hint:-** empno , empname and salary are the class members of the class employee1. From the main function we are passing the values directly to a constructor, the constructor initializes the values to member variables. The display function is used to display the stored values of the member variables.	10.03.2025
8.3	Read 2 matrices from the console and perform matrix addition and multiplication using class and object.	10.03.2025
8.4	Program add two complex numbers	10.03.2025
9	**Classes and Objects [CO 2]- Set 9- Write these programs in Observation Book - (1 hr)**	
9.1	Create a class Account with instance variables accNo, Name, Account type and balance amount. Perform the following operations using different methods i. create an account ii. Deposit amount iii. Withdraw amount iv. Display the details Create a menu driven program of 5 account holders.	13.03.2025
9.2	Define a class employee with instance variables Empid, Empname, Basic Salary, HRA, DA, Gross-Salary. Initialize the instance variables and calculate the gross-salary of 5 employees. Also display Empid, Empname and Gross-Salary of 5 employees. **Hint:-** Use the concept of object array. DA=50% of Basic salary and HRA=5% of Basic Salary. Input the Empid, Empname and Basic Salary of 5 employees using Scanner class.	13.03.2025
10	**Classes and Objects [CO 2]- Set 10- Fair record Questions- Prepare the fair record (2hrs)**	

10.1	Define a class 'product' with data members pcode, pname and price. Create 3 objects of the class and find the product having the lowest price.	13.03.2025
10.2	Create CPU with attribute price. Create inner class Processor with attributes no. of cores, manufacturer and static nested class RAM with attributes memory and manufacturer. Create an object of CPU class and print information of Processor and RAM.	13.03.2025
10.3	Program to create a class for Employee having attributes eNo, eName, eSalary. Read 'n' employee information and Search for an employee given eNo, using the concept of array of Objects.	17.03.2025
11	**Static keyword [CO 2]- Set 11- Write these programs in Observation Book**	
11.1	Write a JAVA program which use static variable to count number of objects of class created using. Hint:- Create a class student with instance rollno and name. Print the students count and display the details of each student.	17.03.2025
11.2	Find the factorial of a number using recursion and static method	17.03.2025
11.3	Program to implement static inner class.	17.03.2025